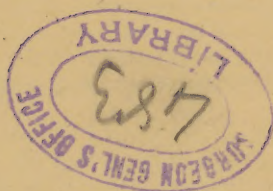


PEARSON (L)

The diagnosis of  
bovine tuberculosis





Pearson (L.)

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### THE DIAGNOSIS OF BOVINE TUBERCULOSIS.

*To the Editor of THE MEDICAL NEWS,*

SIR: THE MEDICAL NEWS of April 9th contained a letter from me, in which the value of tuberculin in the diagnosis of tuberculosis in cattle was considered, and reference was made to the slaughter of a number of tuberculous cows belonging to Mr. J. E. Gillingham.

At the time that the letter was written but a part of the cows that had reacted after the injection of tuberculin had been slaughtered, so that the results of the examination were incomplete.

It will be remembered that out of a total of seventy-nine animals tested with tuberculin, thirty reacted in a way that was taken to indicate tuberculosis; all of these, together with a few calves from diseased cows, have now been slaughtered. All of the animals that reacted proved, upon the post-mortem examination, to be tuberculous.

It does not seem necessary to give tables showing the reactions and results of the post-mortem examinations in each case, as two sample reactions were printed in my last letter. The elevation of temperature that follows the injection of tuberculin in a tuberculous animal comes on in from nine to sixteen hours, and reaches a point from one to six degrees above the normal. In some cases the temperature drops back to normal within a few hours, but in others the fever remains for several days. The second injection is always followed by a milder reaction than the first, even if a period of several days or a month intervenes.

It was found that the degree of reaction was not in proportion to the extent of the lesions, for animals in which the lesions were slight sometimes displayed marked reactions, while the reaction in animals with widespread tuberculosis was sometimes slight. We may thus say



that tuberculin furnishes a poor index to the severity of a case of tuberculosis; by its use we can simply determine the presence of the disease. For this reason tuberculin does not entirely supplant physical examination in the diagnosis of tuberculosis of cattle, but both methods should be used together, and of the two the former is by far the more valuable and important. It is safe to say that by the most careful physical examination not 25 per cent. of the cases of tuberculosis among cattle can be detected, while by the use of tuberculin and physical examination together, all of them can be discovered.

In a recent physical examination of the cattle of the State Agricultural Experiment-Station herd, five cows were selected as being probable subjects of tuberculosis, and were ordered to be killed. My examination with tuberculin revealed but two animals that reacted, and only one of these had been marked as tuberculous. The two methods of examination thus coincided in but one case. The slaughter of the five cows in question showed but two cases of tuberculosis, the two which had reacted.

It is well known that the tuberculosis of cattle is contagious, and sometimes spreads rapidly, until an entire herd is diseased, and that the only way to check the progress of the disease is to destroy or remove all affected animals, enforce good hygiene, and thoroughly disinfect the stable. Heretofore it has been impossible to carry out the first of these measures, on account of the great difficulty in diagnosing bovine tuberculosis in its early stages, and most of the attempts at eradication have been failures, or have occupied a number of years.

It is easy, then, to appreciate the great value of tuberculin to the veterinarian, and the good results that have followed its use in this country are exceedingly gratifying. We have every reason to think that by its use herds can be cleared of tuberculosis, and in this way a great many cases in the human family can be prevented.

Very respectfully yours,

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